

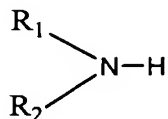
IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A liquid resin, ~~intended in particular~~ for the sizing of mineral fibers, exhibiting a dilutability in water at 20°C at least equal to 1 000%, comprising ~~characterized in that it is composed for~~ at least 70% by weight of condensates obtained from a phenolic compound, ~~from~~ formaldehyde and ~~from~~ an aminoalcohol according to the Mannich reaction.

Claim 2 (Currently Amended): The resin as claimed in claim 1, wherein ~~characterized in that~~ the phenolic compound is phenol, a cresol, resorcinol or a mixture of these compounds.

Claim 3 (Currently Amended): The resin as claimed in claim 1 ~~or 2~~, wherein ~~characterized in that~~ the aminoalcohol is selected from the group consisting of ~~chosen from~~ the compounds of formula



wherein ~~in which~~ R₁ and R₂, which are identical or different, represent H or a linear or branched C₁-C₁₀, ~~preferably C₂-C₅~~, hydrocarbonaceous chain which can comprise ~~include~~ one or more unsaturations and one or more OH radicals, at least one of R₁ or R₂ comprising ~~including~~ at least one OH radical.

Claim 4 (Currently Amended): The resin as claimed in claim 3, wherein ~~characterized in that~~ the OH radical is carried by the terminal carbon atom of the hydrocarbonaceous chain ~~and, preferably, each R₁ and R₂ radical carries a hydroxyl functional group on the terminal carbon of the hydrocarbonaceous chain.~~

Claim 5 (Currently Amended): The resin as claimed in claim 4, wherein ~~characterized in that~~ the aminoalcohol is monoethanolamine or diethanolamine.

Claim 6 (Currently Amended): The resin as claimed in claim 1, wherein ~~one of claims 1 to 5, characterized in that it~~ the resin exhibits a level of free formaldehyde of less than 0.4%.

Claim 7 (Currently Amended): The resin as claimed in claim 1, wherein ~~one of claims 1 to 6, characterized in that it~~ the resin exhibits a level of free phenolic compound of less than 0.02%.

Claim 8 (Currently Amended): The resin as claimed in claim 1, wherein ~~one of claims 1 to 7, characterized in that it~~ the resin exhibits a level of free formaldehyde of less than 0.25%, a level of phenolic compound of less than 0.01% and an infinite dilutability.

Claim 9 (Currently Amended): The resin as claimed in claim 1, wherein ~~one of claims 1 to 8, characterized in that it~~ the resin exhibits a level of ash of less than 0.04% by weight of dry resin.

Claim 10 (Currently Amended): A process for the preparation of the resin as claimed in ~~one of claims 1 to 9~~ claim 1, which consists of:

- in reacting a phenolic compound, formaldehyde and an aminoalcohol according to the Mannich reaction in a formaldehyde/phenolic compound molar ratio of greater than 1, the formaldehyde and the aminoalcohol being reacted simultaneously with the phenolic compound,
- and in cooling the reaction mixture.

Claim 11 (Currently Amended): The process as claimed in claim 10, ~~characterized in that~~ wherein the formaldehyde and the aminoalcohol are reacted gradually with the phenol.

Claim 12 (Currently Amended): The process as claimed in claim 10 ~~or 11~~, ~~characterized in that~~ wherein the formaldehyde, the aminoalcohol and the phenolic compound are reacted in a formaldehyde/phenolic compound and aminoalcohol/phenolic compound molar ratio of between 2 and 3, preferably equal to approximately 3, until a degree of conversion of the phenolic compound of equal to or greater than 99% is obtained.

Claim 13 (Currently Amended): The process as claimed ~~in one of claims 10 to 12~~ claim 10, ~~characterized in that~~ wherein the reaction temperature is between 60 and 100°C and preferably equal to approximately 75°C.

Claim 14 (Currently Amended): The process as claimed in claim 10, ~~characterized in that~~ wherein the formaldehyde and aminoalcohol are introduced separately into the phenolic compound.

Claim 15 (Currently Amended): The process as claimed in claim 10, ~~characterized in that~~ wherein the formaldehyde and aminoalcohol are introduced into the phenolic compound after having been mixed beforehand.

Claim 16 (Currently Amended): A sizing composition for mineral fibers, comprising a resin in accordance with ~~one of claims 1 to 9~~ claim 1, and a crosslinking agent, ~~and optionally additives.~~

Claim 17 (Currently Amended): The composition as claimed in claim 16, ~~characterized in that it comprises~~ comprising, expressed as parts of dry matter, from 18 to 65 parts by weight of resin and from 10 to 82 parts by weight of crosslinking agent.

Claim 18 (Currently Amended): The composition as claimed in claim 16 ~~or 17~~, ~~characterized in that~~ wherein the crosslinking agent is a compound ~~including~~ comprising at least two functional groups capable of reacting with the amine functional groups or the hydroxyl functional groups of the resin.

Claim 19 (Currently Amended): The composition as claimed in claim 18, ~~characterized in that~~ wherein the crosslinking agent is formaldehyde, an amine, ~~such as HMTA, an acid, such as phthalic acid, isophthalic acid, terephthalic acid and citric acid, a poly(carboxylic or acrylic acid) of high molecular mass, of the order of 500 and preferably between 1 000 and 5 000, an anhydride of these acids or a mixture of these compounds.~~

Claim 20 (Currently Amended): A mineral fiber coated with the sizing composition as claimed ~~in one of claims 16 to 19~~ claim 16.

Claim 21 (Currently Amended): The mineral fiber as claimed in claim 20,
~~characterized in that it is composed of~~ comprises glass or ~~of~~ rock.

Claim 22 (Currently Amended): A tissue mat of mineral fibers, ~~in particular of glass~~
~~fibers, characterized in that it comprises~~ comprising a fiber as claimed in claim 20 ~~or 21, and~~
~~that it~~ , wherein the tissue mat has a weight per unit area of between 10 and 300 g/m².

Claim 23 (Currently Amended): A thermal and/or sound insulation product obtained
by forming a blanket of sized mineral fiber as claimed in ~~either of claims 20 and 21~~ claim 20.

Claim 24 (Currently Amended): The product as claimed in claim 23, ~~characterized in~~
~~that it additionally comprises~~ further comprising a fiber tissue mat as claimed in claim 22
positioned over at least one of the external faces.